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**0 371 622**  
**A1**

**EUROPEAN PATENT APPLICATION**

⑤ Int. Cl.<sup>5</sup>: **A47K 11/06, A47K 11/10**

② Date of filing: 01.11.89

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**(B4) Designated Contracting States:**  
**AT BE CH DE ES FR GR IT LI LU NL SE**

⑤ Toilet liner.

57) Toileting means are provided in the form of a disposable liner 1 for fitting to a toileting device or receptacle, such as a child's potty 2. The liner 1 contains liquid-absorbent material provided by a pad 8 of cellulose wadding, and it is self-sealing after use. For sealing a rim portion 5 of the liner 1 is coated with a contact adhesive covered by siliconised release strips 6 and 7 each spanning one-half of the rim portion 5. After use the liner 1 is sealed by stripping off the release strips 6 and 7 and pressing the two halves of the rim portion 5 together.

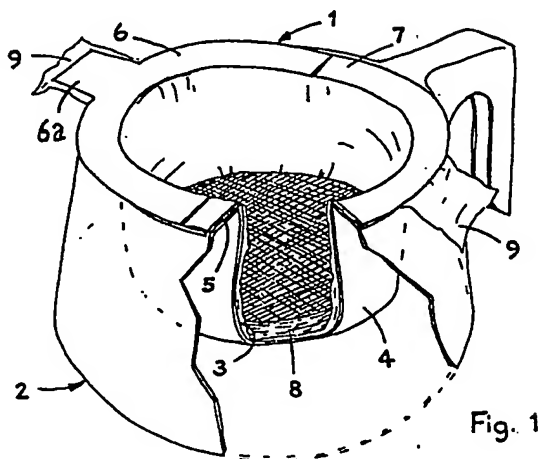


Fig. 1.

**EP 0 371 622 A1**

## TOILETING MEANS

This invention relates to toileting means and provides such means particularly, but by no means exclusively, suitable for use in the toileting of small children employing a child's chamber pot or "potty" as it is hereinafter referred to. Although described herein mainly with reference to such use the invention provides means which are of application throughout the toileting field generally, for example with bedpans, chamber pots and commode arrangements.

Travelling with a small child, particularly whilst it is being "potty" trained, presents toileting problems experienced by all parents. If a potty is used disposal of the contents is at best a nuisance, and thus it is common practice to revert to fitting a diaper or nappy even though this breaks the toilet training routine.

The invention provides means which can in particular be designed to ameliorate the toileting problems when travelling with a small child.

The invention provides means for toileting in the form of a disposable liner for a toileting device or receptacle, such as a child's potty, which liner comprises or contains liquid-absorbent material and can readily be sealed after use. The liner is preferably self-sealing, and to this end may have mutually-adherent rim sections each spanning approximately half of the rim.

Preferably the liquid-absorbent material is provided by an absorbent pad adhered to the inner side of the liner and shaped generally to fit the bottom of the toilet receptacle when the liner is fitted therein. Sealing of the liner after use may be achieved by attaching double-sided adhesive tape to the liner, with the outer adhesive layer protected by release strips which are pulled off to expose the adhesive for sealing purposes prior to disposal of the liner. This tape may be attached to a rim portion of the liner, or alternatively a hot-melt contact adhesive may be applied to the rim and again protected by a release strip. Such an adhesive may be applied to only one-half of the rim.

The liner is preferably manufactured from thin plastics material which is impervious to moisture, a translucent white polythene-like material being suitable. Preferably it is bio-degradable. It is desirably a reasonably good fit within the receptacle with which it is to be used, and whilst it may be formed by any process such as used in the manufacture of plastics bags it is preferably vacuum formed to the required size and shape. This not only provides a good fit within the intended receptacle, but the vacuum forming can provide a thickened rim portion to which the contact adhesive is applied for sealing after use.

The invention will now be further described with reference to the accompanying drawings which illustrate, in sketch form and by way of example, a preferred embodiment of toileting means in accordance with the invention. In the drawings:

Fig. 1 is a perspective and partly cut-away view of a liner in accordance with the invention fitted to a child's potty; and

Fig. 2 is a perspective view of the liner, sealed after use and prior to disposal.

The drawings illustrate a disposable plastics liner 1 in accordance with the invention fitted to a moulded plastics potty 2 of conventional double-walled type. This type is shown by way of example and it will be appreciated that a liner of the invention can be used with a child's potty of any type, or indeed with any toileting receptacle, such as a bedpan or commode pan, if the liner is appropriately sized and shaped. The liner 1, which is preferably vacuum formed from a plastics material impervious to moisture, is a reasonably good fit within the toileting receptacle 3 formed within the inner wall 4 of the potty 2.

The liner 1 has a rim portion 5 which sits on the rim 6 of the potty 2, so that in use the child sits on the rim portion 5 to hold the liner 1 in fitted position. The two semi-circular halves of the rim portion 5 are coated with an adhesive so that their upper surfaces, in fitted position, are adherent. One half of the rim portion 5 has the adhesive thereon covered by a siliconised release strip 6 with a free ear section 6a by which it can readily be gripped by the fingers and stripped off to uncover the adhesive below it. The adhesive on the other half of the rim portion 5 is covered by an adhered thick paper strip 7 which serves to rigidify the rim. A pad 8 of liquid-absorbent material is positioned within the liner, fitting and being secured by adhesive to the bottom thereof. The absorbent pad 8 may be of any suitable material or formation; it is conveniently of cellulose wadding and may be recycled paper wadding.

As shown in Fig. 1, the potty 2 with fitted liner 1 is ready for use. At the end of the toileting operation, the liner 1 with its contents is removed from the potty 2, and if desired a fresh liner can be fitted at this stage so that the potty 2 will be ready for its next use. After removal of the liner 1 it is sealed, by stripping off the release strip 6 and pressing together the mutually-adherent sections of the liner rim, provided by the uncovered adhesive and the paper strip 7, prior to disposal in a suitable manner. When sealed the liner 1, as shown in Fig. 2, forms a plastics bag containing the now-wet pad

8 and/or other contents, and the rim portion 5 has opposed ear sections 9 which in effect provide a carrying handle for the sealed bag.

Vacuum forming of the liner 1 has the advantage that the rim portion 5 can be of thicker material and thus provide a more rigid rim useful not only for fitting the liner but also when the sealed liner is carried prior to disposal. With a sufficiently rigid rim portion such as can be achieved with vacuum forming of the liner, the paper strip 7 and the adhesive by which it is secured can be omitted so that only one half of the rim portion requires adhesive covered, prior to sealing, by the release strip 6. The adhesive is preferably a hot-melt adhesive and the plastics material used for the liner may be bio-degradable for environmental reasons. As an alternative to vacuum forming, the liner could for example be welded up from a blank of the plastics material.

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10. Toileting means according to claim 8 or claim 9, wherein the liner is vacuum formed to the required size and shape with a thickened rim portion.

## Claims

1. Toileting means in the form of a disposable liner for a toileting device or receptacle, characterized in that the liner comprises or contains liquid-absorbent material and can readily be sealed after use.

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2. Toileting means according to claim 1, wherein the liner has mutually-adherent sections such that it is self-sealing after use.

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3. Toileting means according to claim 2, wherein the liner has a rim with mutually-adherent sections each spanning approximately half of the rim.

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4. Toileting means according to any one of the preceding claims, wherein the liquid-absorbent material is provided by an absorbent pad adhered to the inner side of the liner.

5. Toileting means according to claim 4, wherein the absorbent pad is shaped to fit the bottom of the toilet receptacle with which the liner is to be used.

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6. Toileting means according to claim 3, wherein for sealing of the liner after use a hot-melt adhesive is applied to only half of the rim and, prior to sealing of the liner, is covered by a release strip.

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7. Toileting means according to any one of the preceding claims, wherein the liner is manufactured from thin plastics material which is impervious to moisture.

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8. Toileting means according to any one of the preceding claims, wherein the liner is shaped and sized so as to be a reasonably good fit within the receptacle with which it is to be used.

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9. Toileting means according to claim 8, wherein the liner is designed to fit a conventional child's potty.

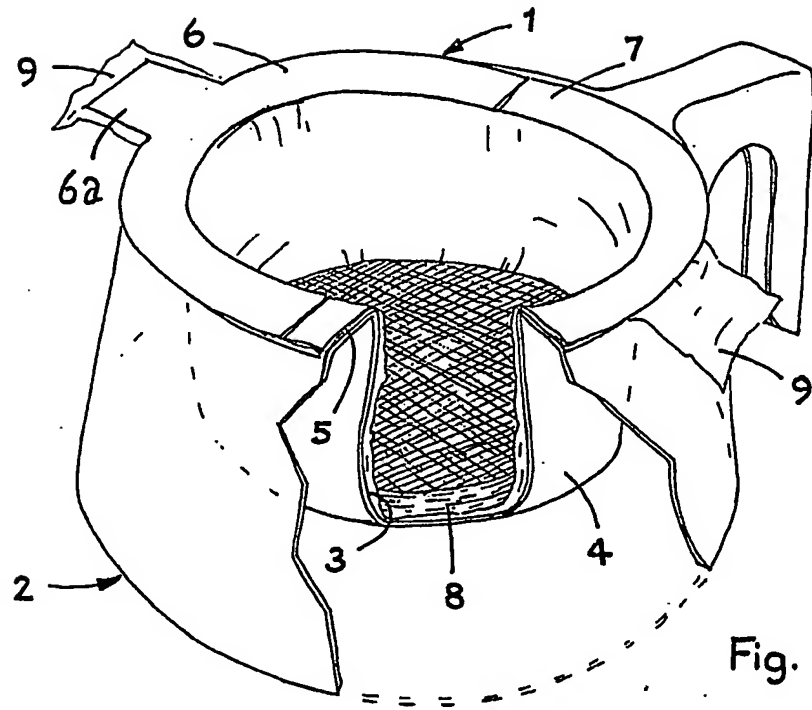


Fig. 1.

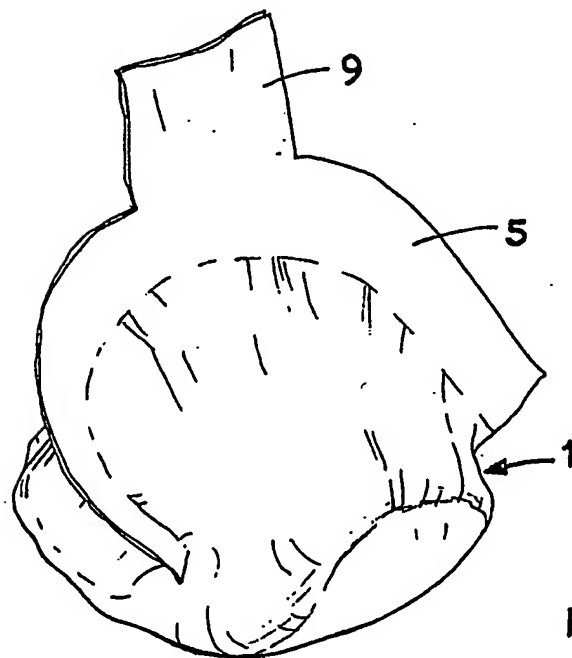


Fig. 2.



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number

EP 89 31 1307

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	GB-A-2 196 246 (VANN) * Page 1, lines 42-65; drawings * ---	1,4-5,7 -9	A 47 K 11/06 A 47 K 11/10
X	FR-A-2 382 222 (DURAND) * Page 1, lines 5-13; page 10, lines 15-23; drawings *	1-4,7	
Y	---	8,9	
Y	DE-A-3 216 136 (HASSE) * Page 6, lines 5-13; page 10, lines 15-23; drawings *	8-9	
A	---	1,4	
A	BE-A- 899 395 (BERNARD) * Page 2, lines 1-32; drawings * -----	1-2,7,8 ,9	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A 47 K A 61 G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 25-01-1990	Examiner LAUE F.M.
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document			